

REMARKS

Claims 2-4 and 7 were cancelled during prosecution of the corresponding PCT application. Claims 1, 5, and 6 are pending the application.

Claims 1, 5, and 6 stand rejected under 35 U.S.C as being unpatentable over United States Patent No. 5,289,146, issued to Plumeret et al. on February 22, 1994 (Plumeret et al.) in view of United States Patent No. 4,994,725, issued to Gschlössl on February 19, 1991 (Gschlössl). Applicant traverses this rejection.

The Examiner states:

Plumeret et al. discloses a contactor apparatus for an electric motor [figure 9] comprising:

- a body [figure 2];
- at least three power terminals [22-24] connected to three-phase power lines [R, S and T] and insulated from one another;
- at least three main starting terminals [15-17] respectively connected to terminals of a three-phase motor [M];
- at least three star-delta terminals [25-27] connected to the three-phase motor;
- an electromagnet for a main circuit [7];
- an electromagnet for the star-delta terminals [6]; and
- main and star-delta circuit switching units [figure 3].

Plumeret et al. disclose the instant claimed invention except for: the specific arrangement of the terminals on the body.

Gschlössl discloses a drive arrangement having motor terminals mounted on an opposite end of the body than the power terminals. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mounting

arrangement of Gschlössl for the terminals of Plumeret et al. for the purpose of improving isolation.

Applicant submits that even if the references teach that what the Examiner states they teach, the combination of the references does not teach or suggest the claimed invention.

The invention is configured to switch on and off a main power source by electronic switching operations conducted by a main circuit-end electromagnet and a main circuit-end vertical moving member, and to selectively enable a star or delta connection in accordance with the switching operation of a star-delta connection-end electromagnet and a star-delta connection-end vertical moving member. As such, different from a conventional star or delta switch using at least 2 or 3 electromagnetic contactors, this invention discloses a single electromagnetic switch device for star-delta connections of a three-phase electric motor, so that it can simplify the wiring required for desired connections; and achieve improvements in assemblability and productivity, and thereby obtain an enhanced stability against erroneous connections.

Moreover, as set forth in the claims, the invention includes “first through third power terminals arranged at one side portion of the body on an upper surface of the body and respectively connected to three-phase power lines; first through third main terminals arranged at an intermediate portion of the body on the upper surface of the body and respectively connected to one-side terminals of a three-phase electric motor; first through third star-delta terminals arranged at the other side portion of the body on the upper surface of the body and connected to the other-side terminals of the three-phase electric motor, respectively” and “a star connection plate set on the upper surface of the body and adapted to connect the first through third star-delta terminals to a star circuit,” which is nowhere taught or suggested by the cited references.

Accordingly, neither claim 1 nor claims 5,6 that depend therefrom are obvious in view of the cited references.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw the presently outstanding rejection. It is believed that a full and completed response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this Response is respectfully requested.

If, for any reason, the Examiner determines that one or more of the pending claims are not allowable, the undersigned respectfully requests a telephone call to discuss the matter.

Respectfully submitted

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